

## **ABSTRACT**

### **Aim**

The aim of this study is to evaluate the efficiency of photodynamic therapy, when used as an adjunct to scaling and root planing, in chronic Periodontitis patients.

### **Materials and Methods**

A split mouth design was conducted in 32 patients with Chronic Periodontitis. The control site underwent scaling and root planing and the experimental site were additionally treated with Photodynamic therapy. Clinical parameters namely, Plaque index, Gingival index, Papillary bleeding index, Probing pocket depth, Clinical Attachment level were recorded at baseline, 1 month, 3 month and 6 month post operatively.

### **Results**

Both treatment strategies showed significant improvement in Plaque index, Gingival index, papillary bleeding index, Probing pocket depth and Clinical Attachment levels. At study termination, Photodynamic therapy implemented treatment strategy resulted in additional improvement in the clinical parameters like plaque index, gingival index and Probing pocket depth, Papillary Bleeding Index and gain in Clinical Attachment Level at 6 month.

## **Conclusion**

These findings suggest that a Photodynamic therapy implemented treatment strategy along with scaling and root planing may improve the clinical outcome for the treatment of chronic Periodontitis in comparison to scaling and root planing alone.

**Key Words:** Periodontitis, Scaling and Root planing, Photodynamic therapy